



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,234	11/29/2001	Mark Glazier	08364.0024	9841

7590 06/04/2003

Finnegan Henderson Farabow Garrett & Dunner
1300 I Street NW
Washington, DC 20005

EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,234

Applicant(s)

GLAZIER, MARK

Examiner

Melody M. Burch

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 21 March 2003.

2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 63-69 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 63-69 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the embodiment including a variable throttling valve, a pressure sensor, a pressure regulator, a control means, and first and second air bags responsive to the gas pressure to urge a valve element towards its minimum and maximum throttling positions, respectively, must be shown or the feature(s) canceled from the claim(s). The embodiments of figures 1 and 5 do not show the control means and the embodiment of figures 3 and 4 does not show the first and second air bags positioned to urge the valve element towards its minimum and maximum throttling positions nor the pressure regulator. Also the vehicle claimed in claims 67-69 is not shown. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 63-69 are objected to because of the following informalities: The phrase "towards it maximum" in the last line of the claim should be changed to --towards its maximum--. Appropriate correction is required. The remaining claims are objected to due to their dependency from claim 63.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 63-69 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed specification fails to provide support for the limitation of the vehicle body being supported specifically on a rear axle as first claimed in claim 63. The specification provides support for a body "suspended on one or more axles" however, the one axle may be a front axle and the additional axles may include the middle axles of a large truck, for example. The remaining claims are rejected due to their dependency from claim 63.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 63-69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3683

The following phrases lack proper antecedent basis in the claims:

- The phrase "the suspension unit" in line 9 of claim 63;
- The phrase "the valve element" in line 11 of claim 63 (Examiner has interpreted the valve element to be a distinct element from the valve member used as the subject of an intended use recitation);
- The phrase "said plurality of reference fluid pressures" in lines 3-4 from the bottom of claim 63;
- The phrase "said selected reference fluid pressure in line 2 from the bottom of claim 63.

Re: claim 63. The phrases "its minimum throttling position" in line 11 and "it maximum throttling position" in the last line of the claim is indefinite since it is unclear the minimum and maximum throttling positions claimed in line 11 and in the last line are intended to be the same or different from the minimum and maximum throttling positions claimed in lines 5-6.

Re: claim 63. It is unclear to the Examiner whether Applicant intends to claim the combination of the load sensing system and the vehicle or the subcombination of the load sensing system. Applicant uses functional language to describe the vehicle in the preamble of the claim but positively recites the brake actuator and rear axle of the vehicle in the body of the claim. As best understood, Examiner has interpreted the claim to be directed to the subcombination of the load sensing system.

The remaining claims are indefinite due to their dependency from claim 63.

Claim Rejections - 35 USC § 102

Art Unit: 3683

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 63, 64, 67, and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5615931 to Stumpe et al. Stumpe et al. show in figure 1 a load sensing system 14,54,22 for a braking system of a vehicle having a vehicle body supported on a rear axle by a pressurized gas suspension system whose gas pressure is varied in dependence on the vehicle load, the load sensing system comprising: a variable throttling valve 10 having a valve member or unnumbered pedal shown at the top of element 10 movable between minimum and maximum throttling positions to control the flow of a brake operating fluid to a brake actuator 42 of the rear axle for applying braking force to a rear wheel of the vehicle, a pressure sensor 58 and that disclosed in col. 2 lines 57-59 for detecting the gas pressure in the suspension unit, a first air bag 54 responsive to the gas pressure in the suspension unit and, as broadly claimed, operable to urge a valve element towards its minimum throttling position by virtue of the forces resulting from the expansion and contraction of the air bag, a pressure regulator 22 for supplying a reference fluid pressure at one of a plurality of predetermined reference fluid pressures determined by element 14 as disclosed in figures 8 and 9, control means 14 operable to select one of the plurality of reference fluid pressures on the basis of the sensed gas pressure in the suspension unit as

Art Unit: 3683

disclosed in figures 8 and 9 (see response to arguments section for details), and a second air bag 56 responsive to the selected reference fluid pressure and, as broadly claimed, operable to urge a valve element towards its maximum throttling position by virtue of the forces resulting from the expansion and contraction of the air bag, as best understood by Examiner.

Allowable Subject Matter

9. Claims 65, 66, and 69 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. The arguments filed 3/21/03 have been considered but are not persuasive. Applicant argues that Stumpe et al. fail to disclose or suggest any load sensing system having a control means for selecting one of a plurality of reference fluid pressures on the basis of a sensed gas pressure in the suspension unit. Examiner notes that in col. 2 lines 53-55 Stumpe et al. discloses that sensor 58 is used for pressure detection "and thus for detecting the axle load". In figures 8 and 9, particularly in steps 112, 114 and in steps 204, 206, 208, 210 it is evident that one of a plurality of reference fluid pressures or pressure characteristics is chosen based on the sensed gas pressure by way of the sensed axle load outputted from sensor 58.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5346246 to Lander et al. teaches the use of a load sensing system comprising a variable throttling valve 80 having a valve member 110 movable between a minimum and maximum throttling position to control flow of an operating fluid, a device 52 that is capable of sensing suspension unit pressure (particularly when the pressure is below a certain value), a first air bag 30 responsive to the gas pressure and operable to urge the valve member, a pressure regulator 62,64, control means 60, and a second air bag 32, but does not include the limitation of the operating fluid being brake operating fluid being circulated to a brake actuator of a rear axle for applying braking force to a rear wheel of the vehicle and does not show any

Art Unit: 3683


connection of the load sensing system to the brake system to indicate that the load sensing system of Lander et al. is at least capable of being used to control the flow of brake operating fluid to a brake actuator of a braking system of a vehicle.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmb 5/27/03
mmb
May 27, 2003


JACK LAVINDER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600